ORIGINAL RESEARCH PAPER

Public Health

KEY WORDS: Henoch-Schonlein, erythematous macules, purpura, rash.

A CASE REPORT ON HENOCH-SCHONLEIN PURPURA

Punuri Salome Satya Vani * Assistant professor, Department of Pharmacy Practice, Sri Venkateshwara College Of Pharmacy, 86- Hiteh City Road, Madhapur, Hyderabad-81, Telangana, India. *Corresponding Author

Dr. M. Baghavan Raju Principal, Department of Pharmacy Practice, Sri Venkateshwara College Of Pharmacy, 86- Hiteh City Road, Madhapur, Hyderabad-81, Telangana, India.

K. Swaroopa Pharm.D Intern, Department of Pharmacy Practice, Sri Venkateshwara College Of Pharmacy, 86- Hiteh City Road, Madhapur, Hyderabad-81, Telangana, India.

A. Mallikarjun Pharm.D Intern, Department of Pharmacy Practice, Sri Venkateshwara College Of Pharmacy, 86- Hiteh City Road, Madhapur, Hyderabad-81, Telangana, India.

ABSTRACT

Henoch-Schonlein blood disease (HSP), or IgA Vasculitis, is characterized by the clinical quadruplet of palpable purpura, arthralgia/arthritis, abdominal pain, associated hematuria. The bulk of cases, some 90%, are diagnosed in youngsters. Symptoms of HSP are Rash (purpura), Swollen, sore joints (arthritis), Abdominal pain, Kidney impairment. The diagnosis of HSP may be clear when the typical rash, arthritis, and abdominal pain are present. Occasionally, when the diagnosis is uncertain, particularly if the only symptom is the classic rash, your doctor may perform biopsies of the skin or kidney. Urine and blood tests will likely be done to detect signs of kidney involvement. In this case, Paediric patient was presented with complaints of pain in abdomen since 15 days; vomiting 2 episodes associated with erythematous macules, rashes on legs and were evaluated as Henoch-Schonlein blood disease. Patient was managed with PPI's, steroids, antibiotics and other supportive therapy and was discharged in stable condition.

INTRODUCTION

Henoch-Schonlein blood disease (HSP), or IgA Vasculitis, is characterised by the clinical quadruplet of palpable purpura, arthralgia/arthritis, abdominal pain, associated hematuria. The bulk of cases, some 90%, are diagnosed in youngsters. There's a male predominance and a rise in range of cases throughout the winter season. The incidence of HSP in children is approximately twenty cases per 100,000. It's less common in adults with textbooks news an incidence of fourteen cases per million. Triggers of HSP embrace medications, infections, malignancies, inflammatory disorders, and upset causes. The commonest triggers in children are infectious, particularly microorganism infections, streptococcic pharyngitis, and mycoplasma. In adults, medications are the foremost common trigger. Nearly each category of medication will induce HSP, and also the time from introduction to reaction may vary from hours to years. Therefore, it should be troublesome to work out that drug is responsible. So as to diagnose HSP the patient should demonstrate palpable blood disease and one among the following: arthritis/arthralgia, diffuse abdominal pain, a diagnostic assay demonstrating IgA deposition or urinary organ involvement manifested as symptom or proteinuria.

Pathogenesis: HSP is because of abnormal immune gamma globulin deposition in vessel walls. Abnormal IgA1 glycosylation ends up in the formation of IgG-IgA1 immune complexes that populate vessel walls and activate the alternate complement pathway. Complement activation induces leukocytetaxis with ensuing unleash of chemical action enzymes that cause epithelial tissue injury. The post capillary venules of the derma bear intense neutrophilic tube-shaped structure inflammation. The resulting inflammation and extravasations of red blood cells may be appreciated clinically as palpable blood disease.

Fig.1: Tests revealed a high density of neutrophil infiltration with extravasation of red blood cells and complete occlusion of blood vessels consistent with leukocyte disruption vasculitis.

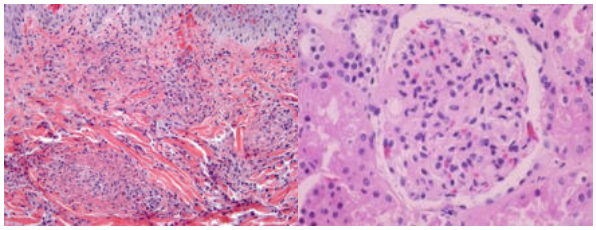
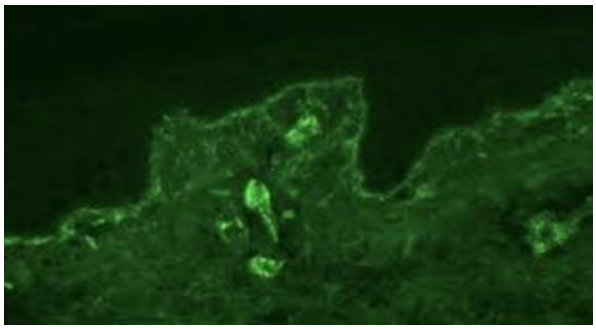


Fig.2: Direct immunofluorescence (DIF) findings by immunoglobulin A (IgA) in the skin of adults with Henoch-Schonlein purpura. The superficial dermis exhibits strong vascular fluorescence with IgA.



Clinical Findings: It's vital to judge patients with palpable purpura for joint involvement, duct involvement, and renal involvement. Up to 75% of adult patients with HSP can have joint involvement that typically have an effect on the knees and ankles. The rubor that happens in HSP might affect the vessels within the gastrointestinal tract leading to viscus ischaemia and hydropsinflicting the patient to feel severe abdominal pain.

Nephritic involvement is seen in 40-75% patients with HSP and typically presents as proteinuria, symptom or new onset hypertension. nearly all patients with palpable blood disease higher than the waist will have nephritic involvement. In addition, up to 35% of adults will develop chronic renal

insufficiency, particularly if the palpable blood disease happens higher than the waist or if there is an elevated corpuscle alleviation rate.

Diagnosis:

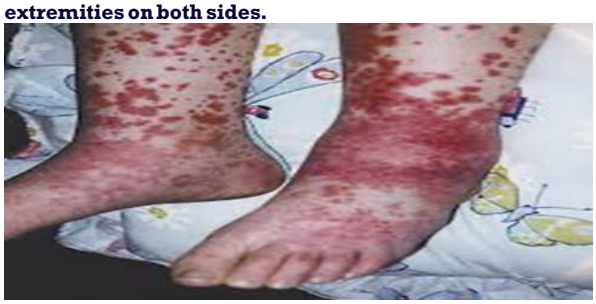
Punch biopsies were performed and submitted for histopathological and direct technique (DIF) examination. Hematoxylin &resorcinolphthalein (H&E) staining of the specimens discovered dense neutrophilic infiltrate with red blood cell extravasation, hemorrhage, and complete obliteration of the blood vessels in step with leukocytoclastic rubor DIF revealed perivascular immune gamma globulin, C3, and protein deposits consistent with IgA rubor.

These diagnostic test leads to the setting of the clinical findings of palpable purpura, arthralgia, proteinuria, hematuria, and cardiovascular disease confirmed the identification of adult Henoch-Schonlein Purpura.

CASE REPORT:

An 8 year old male patient came to tertiary care hospital presented with complaints of pain in abdomen since 15days, vomiting 2 episodes associated with erythematous macules, rashes on legs. Patient was conscious and coherent on examination and vitals of patient were Temperature 97.6°F, BP: 110/80 mmHg, RR: 20 breaths/min, PR: 96 beats/min,total WBC 11,900 cells/cumm, neutrophils – 76%,urine analysis were done and appearance was hazy, pus cells 3-5,epithelial cells 6-8 HPF and ultra sound abdomen;-sub-centimetric mesenteric lymph nodes noted in peri-umbilical region.

Fig. 3.Purplish, erythematous, unbeatable papules are distributed on the extensor surfaces of the lower extremities on both sides.



On first day physician was advised investigations of complete blood picture,urine analysis and ultra sound abdomen, Patient underwent above investigations and diagnosed with HSP along with acute gastritis and patient was treated with PAN (pantoprazole) 40mg OD IV,prednisolone 10mg BD PO.cefotaxime 100mg BD PO, syp.sucralfate 5ml TID, syp.cyclopan(Dicycloame) 5ml SOS,Zofer (ondansetron) 2mg BD IV and on day two syp.ondan 4mg/5ml BD, and above mentioned medications were continued,and on third day he had complaints of constipation and physicianadvised syp.cremaffin (Magnesium hydroxide + paraffin) 10ml OD and later patient was discharged with Tab. PAN 20mg OD. Tab.prednisolone 10mg BD,Syp.sucralfate 5ml TID and SMUTH ointment for 1 week. Patient and his care taker were given advice on how to proceed with their treatment and the care taker was counseled about drug adherence.

CONCLUSION:-

Patient was admitted in pediatric ward with the complaints of pain in abdomen since 15days, vomiting 2 episodes associated with erythematous macules, rashes on legs and was diagnosed with HSP along with acute gastritis, However relevant investigations such as Complete blood picture, urine analysis, ultrasound abdomen were performed, which indicated HSP with acute gastritis. Patient was further managed with proton pump inhibitors, corticosteroids and other supportive therapy.

Conflicts Of Interest: NO

REFERENCES:

1. Poterucha, T. J. et al. (2014). A retrospective comparison of skin and renal direct immunofluorescence findings in patients with glomerulonephritis in adult Henoch-Schonlein purpura. Figure 1. Journal of Cutaneous Pathology, 41(7), 585. Retrieved March 31, 2016.
2. Shrestha S et al. Henoch Schönlein purpura with nephritis in adults: adverse prognostic indicators in a UK population. QJM. 2006.
3. Pillebout et al. Henoch-Schönlein Purpura in adults: outcome and prognostic factors. J Am Soc Nephrol. 2002.
4. James, W.D., Berger, T.G., & Elston, D.M. (2011). Andrews' diseases of the skin: Clinical dermatology (11 th ed.). Saunders Elsevier Publications.
5.. https://cdn.ymaws.com/www.aocd.org/resource/resmgr/meeting_resources/2017Spring/Syllabus/Posters/Diaz.pdf.